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UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

District 9

REPORT OF INVESTIGATION
(Underground Coal Mine)

NONINJURY COAL MINE OUTBURST ACCIDENT

Dutch Creek No. 1 Mine (ID No. 05-00301)
Mid-Continent Resources, Inc.
Redstone, Pitkin County, Colorado

February 22, 1983

by

Louis Villegos
Coal Mine Inspector

Originating Office - Mine Safety and Health Administration
Drawer J, 575 East First South, Price, Utah 84501
Jensen L. Bishop, Subdistrict Manager

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Abstract of Investigation

U.S. Department of Labor
Mine Safety and Health Administration



Authority—

This report is based on an investigation made pursuant to the Federal Mine Safety and Health Act of 1977, Public Law 95-173, as amended by Public Law 95-164.

SECTION A—IDENTIFICATION DATA

Noninjury Coal Mine
1. Title of investigation: Outburst Accident
2. Date MSHA investigation started: 02/22/83
3. Report release date: 04/10/83
4. Mine: Dutch Creek No. 1
5. Mine ID number: 05-00301
6. Company: Mid-Continent Resources, Inc.
7. Town, County, State: Redstone, Pitkin Co., CO
8. Author(s): Louis Villegos

SECTION D—ORIGINATING OFFICE

18 Mine Safety and Health Administration
Coal Mine Health and Safety District No.: 9
Address: Drawer J, Price, UT 84501

SECTION B—MINE INFORMATION

9. Daily production: 1,500 Tons
10. Surface employment: 4
11. Underground employment: 92
12. Name of coalbed: Coal Basin "B"
13. Thickness of coalbed: 84 Inches

SECTION C—PAST QUARTER INJURY FREQUENCY RATE (PQIF)

14. Industry: 11.08
15. This operation: 36.45
16. Training program approved: Yes
17. Mine Profile Rating: _____

SECTION E—ABSTRACT

On Tuesday, February 22, 1983, about 11:15 a.m., an outburst of coal occurred in the face of the 102 longwall section. The accident occurred due to the overburden which is in excess of 2,500 feet. No injuries or property damage were sustained.

SECTION F—MINE ORGANIZATION

Company officials:	Name	Address
19. President:	John A. Reeves	P.O. Box 980, Carbondale, CO 81623
20. Superintendent:	Allyn Davis	P.O. Box 980, Carbondale, CO 81623
21. Safety Director:	Donald Ford	P.O. Box 980, Carbondale, CO 81623
22. Principle officer—H & S:	Donald Ford	P.O. Box 980, Carbondale, CO 81623
23. Labor Organization:	None	
24. Chairman—H & S Committee:	N/A	

Commentary

On Tuesday, February 22, 1982, the day shift longwall mining crew, under the supervision of Murray Aitken, section foreman, entered the mine by hoist man-trip and traveled by foot the last 1,180 feet to the 102 advancing longwall section, arriving about 7:25 a.m. Aitken conducted an examination of the section prior to energizing any power to the equipment, then assigned duties and work location to his crew. Mining of coal and other activities commenced and continued without anything unusual happening until the accident occurred about 11:15 a.m. Ken Martin and Mike Jerome, head and tailgate shear operators respectively, were cutting the face, on the second pass, toward the headgate when the coal outburst occurred. The tailgate cutting shear wheel of the Eickoff 300 LH shear was located at No. 13 shield at the time. All the miners in the longwall face areas immediately ran down to the headgate and a head count made which showed everyone was accounted for, with injury to no one. Charles Loveland, who was at the headgate control station, stated that all electrical power to the longwall was deenergized at the transformer instantly by methane monitors, with sensors located at the last tailgate shield and in the 101 bleeder entry. The outburst pushed coal outby the face from 6 to 9 feet for a distance of 122 feet in length. About 60 feet of the coal was piled up 3 to 4 feet in height, and to the face conveyor side board. Most of the outburst material was in large lumps. There was one hole in the coal face against the roof line, immediately up hill from the shear machine, which measured 1 foot in height, 1½ feet in width, and 6 to 10 feet in depth. The occurrence was reported by phone to MSHA inspector Louis Villegos at the mine surface at 11:20 a.m. on February 22, 1983, and an investigation was started immediately.

Discussion and Evaluation

The investigation revealed the following factors relevant to the occurrence of the outburst of coal:

1. The coal outburst caused the withdrawal of miners and disrupted mining activity for more than an hour.
2. The coal outburst affected ventilation.
3. High concentrations of methane gas were liberated during and after the outburst. The highest reading observed at the methane monitor mounted on the headgate control station was 6.2%.
4. The force of the outburst pushed coal outby the face from 6 to 9 feet, 4 inches to 4 feet in height, and for a distance of 122 feet between No. 13 shield and No. 37 shield.
5. The overburden in the 102 longwall section is in excess of 2,500 feet. Due to this natural condition, extreme pressure is exerted on the coalbed.

6. The longwall face being mined was approximately 800 feet long, using the advance method of mining utilizing construction of packwalls to maintain ventilation and haulage entries.

7. The longwall face had been volley fired on the immediate prior "graveyard" shift.

8. Methane monitors had deenergized the electrical power to the longwall section.

9. The 102 longwall section has been advanced approximately 400 feet from its start line.

Findings of Fact

Evidence and findings of the investigation indicated there were no violations of Title 30 CFR which contributed to the occurrence of the accident. However, a 107(a) order of withdrawal was issued because of the presence of methane gas which was in excess of 1.5%.

Conclusion

The accident occurred because of the overburden which is in excess of 2,500 feet in thickness and exerts extreme pressure on the coalbed.

Respectfully submitted,



Louis Villegas
Coal Mine Inspector

Approved:



Jensen L. Bishop
Subdistrict Manager

APPENDIX

The investigation was conducted by the Mine Safety and Health Administration and those persons present during the investigation were:

Mid-Continent Resources, Inc. Officials

Murray Aitken	Foreman
Allyn Davis	Superintendent
M. J. Turnipseed	Vice President Mine Operations
John Reeves, Jr.	Longwall Manager

Mine Safety and Health Administration

Louis Villegos	Coal Mine Inspector
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